



U.S. Department
of Transportation

**Research and
Special Programs
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

JAN 11 2001

DOT-E 9716
(EIGHTH REVISION)

EXPIRATION DATE: June 30, 2002

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Scott Health & Safety
Monroe, North Carolina
(Former grantee: Q3 Comdyne Cylinders, Inc.)

(See Appendix A to this exemption for a list of additional grantees)

2. PURPOSE AND LIMITATIONS:

- a. This exemption authorizes the use of a FRP-1 type, non-DOT specification cylinder for the transportation in commerce of certain hazardous materials described in paragraph 6 subject to the limitations and special requirements specified herein. This exemption provides no relief from any Hazardous Materials Regulations (HMR) other than as specifically stated herein.
- b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.302(a)(1); § 173.304(a) and (d); § 175.3 in that a non-DOT specification cylinder is not authorized except as prescribed herein.

5. BASIS: This exemption is based on the application of Scott Health & Safety dated June 28, 2000, submitted in accordance with § 107.109.

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6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/ Hazardous Material Description	Hazard Class/ Division	Identi- fication Number	Packing Group
Carbon Dioxide	2.2	UN1013	N/A
Compressed gas, oxidizing, n.o.s. (containing up to 39% by volume oxygen)	2.2	UN3156	N/A
Helium, compressed	2.2	UN1046	N/A
Hydrogen, compressed	2.1	UN1049	N/A
Methane, compressed or Natural gas, compressed (with high methane content)	2.1	UN1971	N/A
Nitrogen, compressed	2.2	UN1066	N/A
Oxygen, compressed	2.2	UN1072	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packaging prescribed is a non-DOT specification fiber reinforced plastic (FRP) full wrapped (FC) composite cylinder made in accordance with Comdyne I, Inc.'s drawings 285-10000 dated August 15, 1986, 285-10010 dated June 6, 1986, 285 10000.AFA dated June 3, 1988, 285 10010.LFA dated June 6, 1988, 550 10000.AFA dated June 13, 1988, 550 10010.LF dated June 8, 1988, 45110000.AF dated May 20, 1992, and 45100001.LF dated April 27, 1992, on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA) and conforming with Basic Requirements for Fiber Reinforced Plastic Type 3FC Composite Cylinders (DOT FRP-1 Standard, (178.AA), Revision 2 dated February 15, 1987) except as follows:

§ 178.AA-5 Material.

(a) Aluminum liner must be 6061 and T6 temper. Cylinders constructed with aluminum liner 6351 before January 1, 1990, can remain in service if requalified in accordance with § 173.34(e).

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§ 178.AA-18 Design qualification tests.

- (b) Applies, except that designs using 6061 with the same mechanical strength as 6351 liner previously qualified under this exemption may be qualified based on acceptable results of tests on the largest capacity (with the same diameter and service pressure rating) cylinder to represent tests for smaller sized cylinders (with the same diameter and service pressure rating). In this case, mechanical strength of 6061 alloy must be the same (within plus or minus 2-1/2 percent of mechanical properties of 6351 alloy used).
 - (c) Applies, except that designs using 6061 with the same mechanical strength as 6351 liner previously qualified under this exemption may be qualified based on acceptable results of tests on the largest capacity (with the same diameter and service pressure rating) cylinder to represent tests for smaller sized cylinders (with the same diameter and service pressure rating). In this case, mechanical strength of 6061 alloy must be the same (within plus or minus 2-1/2 percent of mechanical properties of 6351 alloy used).
 - (d) Not required for designs using 6061 T6 alloy with mechanical properties within plus or minus 2-1/2 of strength of 6351 alloy previously used.
- b. Cylinders may not be used for underwater breathing purposes.
 - c. Cylinders used in oxygen service must conform with § 173.302(a)(5)(i) through (a)(5)(iv).
 - d. Cylinders manufactured under this exemption are not authorized for use fifteen (15) years after the date of manufacture.
 - e. Each cylinder must be reinspected and hydrostatically retested every three years in accordance with § 173.34(e), as prescribed for DOT 3HT specification cylinders, except that the rejection elastic expansion does not apply and the permanent volumetric expansion may not exceed 5 percent of the total volumetric expansion at test pressure. Retest dates must be stamped on the exposed metallic surface of the cylinder neck or marked on a label securely affixed to the

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cylinder and overcoated with epoxy near the original test date. Reheat treatment or repair of rejected cylinders is not authorized. When a hydrostatic retest is repeated as provided for in § 173.34(e)(4)(v), only two such retests are permitted.

f. A cylinder that has been subjected to fire may not be returned to service.

g. Transportation of flammable gases is not authorized aboard passenger or cargo vessel, rail car or passenger-carrying aircraft.

h. Cylinders must be packaged in accordance with the § 173.301(k).

i. No person may perform inspection and testing of cylinders subject to this exemption unless that person (1) holds a current copy of this exemption at the location of such inspection and testing, and (2) complies with all the terms and conditions of this exemption. The marking of the retester's symbol on the cylinders certifies compliance with all of the terms and conditions of this exemption.

j. Filling requirements are subject to all terms contained in § 173.302 for 3AL specification cylinders.

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this exemption who receives a package covered by this exemption may reoffer it for transportation provided no modification or change is made to the package or its contents and it is reoffered for transportation in conformance with this exemption and the HMR.

b. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

c. The cylinders described in this exemption are authorized only for normal transportation as an article of commerce i.e., the movement of hazardous materials from cosignor to consignee.

d. New construction of cylinders after June 30, 2000, is not authorized.

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9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, cargo aircraft only, and passenger-carrying aircraft (See paragraph 7.g. for restrictions).
10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each cargo vessel and aircraft used to transport packages covered by this exemption. The shipper must furnish a current copy of this exemption to the air carrier before or at the time the shipment is tendered.
11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
- o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, Parts 171-180.
 - o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (Sections 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must also inform the AAHMS, in writing, as soon as practicable of any incidents involving the package and shipments made under this exemption.

Issued in Washington, D.C.



Robert A. McGuire
for Associate Administrator for
Hazardous Materials Safety

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Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590.
Attention: DHM-31.

The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

Copies of exemptions may be obtained from the AAHMS, U.S. Department of Transportation, 400 7th Street, SW, Washington, DC 20590-0001, Attention: Records Center, 202-366-5046.

PO: sln

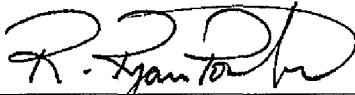
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The following are hereby granted party status to this exemption based on their applications submitted in accordance with § 107.107 or § 107.109, as appropriate:

Company Name City/State	Application Date	Issue Date	Expiration Date
Vallen Safety Supply Company Houston, TX	1/11/2001	JAN 11 2001	6/30/2002



for Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety